

Efficacy Trials - Injection Method

Giant Hogweed, *Heracleum mantegazzianum*

Submitted: Clark County Weed Management
Philip Burgess, Director

Focus: Efficacy Results of Injection Method used on Giant Hogweed

Process: Injection Method

Dates(s): Initial Treatment -- May 10, 2005
Follow-up Treatments -- May 25, 2005

Location(s): Benton Drive, Vancouver, WA

Method of Control:

Injection of Roundup Pro Concentrate at various herbicide rates at approximately 6" above the ground

- 5 mL @ 2 % v/v solution H₂O
- 5 mL @ 5 % v/v solution H₂O
- 5 mL @ 8 % v/v solution H₂O
- 5 mL @ 50 % v/v solution H₂O

Treatment Notes:

One stem of each plant was injected, plants were at pre-flower stage, and approximately 30" tall.

Control Results:

Trial number 1, using 2% solution was the only one showing poor control. All others showed good or excellent results.

Non-target Effect:

No visible evidence to adjacent rosebushes.

Conclusion/Recommendations

The results indicate that the rate of 5 mL of 5% solution is adequate to control Giant hogweed.

Efficacy Trial Results On Giant Hogweed	
Site name	Benton Drive
Address	8602 NE Benton Dr., Vancouver, WA
Plot #	Plot #1
Reference #	
Treatment Date	May 10, 2005
Treatment Method:	
Treatment Method	Injection
Herbicide	Roundup Pro Concentrate
Injection Dosage	5 mL 2% v/v H2O
Area:	
Area Treated	8 sq. ft.
Total number of plants in area (rhizomic connection?)	4
Number of plants/stems actually treated	4
Plant Phenology:	
Plant phenology	rosette to pre-bloom
Typical plant height	30"
Typical plant stem diameter	< .5"
Follow-up & Observations:	
Date	May 25, 2005
Observations	12 stems or canes evident one stem yellow and drooping most stems/canes erect two (2) additional canes treated stem diameter now .5" to 5/8" treatment with 5 mL of 5% solution
Date	June 13, 2005
Observations	All plants have died.
Control percentage:	
Of plants/stems treated -- Number controlled	4/ --1 partial control
Control percentage	25%
Number Plants Controlled:	
Total # of plants controlled (rhizomic connection?)	n/a
Notes:	
5 mL 2% v/v H2O -- Control rate not very effective	

Efficacy Trial Results On Giant Hogweed	
Site name	Benton Drive
Address	8602 NE Benton Dr., Vancouver, WA
Plot #	Plot #2
Reference #	
Treatment Date	May 10, 2005
Treatment Method:	
Treatment Method	Injection
Herbicide	Roundup Pro Concentrate
Injection Dosage	5 mL 5% v/v H2O
Treatment Area:	
Area Treated	6 sq. ft.
Total number of plants in area (rhizomic connection?)	n/a
Number of plants/stems actually treated	6
Plant Phenology:	
Plant phenology	rosette to pre-bloom
Typical plant height	30"
Typical plant stem diameter	< .5"
Follow-up & Observations:	
Date	May 25, 2005
Observations	18 canes or stems evident canes drooping and yellowing, wilted or laying on ground smallest leaves brown one additional stem injected with 5 mL @ 5% v/v solution
Date	June 13, 2005
Observations	All plants completely dead
Control percentage:	
Of plants/stems treated--Number controlled	7/7 -- Controlled
Control percentage	100%
Number Plants Controlled:	
Total # of plants controlled (rhizomic connection?)	n/a
Notes:	
5 mL 5% v/v H2O -- No damage to existing nearby vegetation, roses in this case.	

Efficacy Trial Results On Giant Hogweed	
Site name	Benton Drive
Address	8602 NE Benton Dr., Vancouver, WA
Plot #	Plot #3
Reference #	
Treatment Date	May 10, 2005
Treatment Method:	
Treatment Method	Injection
Herbicide	Roundup Pro Concentrate
Injection Dosage	5 mL 8% v/v H2O
Area:	
Area Treated	10 sq ft
Total number of plants in area (rhizomic connection?)	n/a
Number of plants/stems actually treated	10
Plant Phenology:	
Plant phenology	rosette to pre-bloom
Typical plant height	30"
Typical plant stem diameter	< .5"
Follow-up & Observations:	
Date	May 25, 2005
Observations	28 canes now evident Treated one additional cane of each plant, 5 mL @ %, canes drooping and leaves yellowing and limp
Date	June 13, 2005
Observations	All plants dead
Control percentage:	
Of plants/stems treated--Number controlled	10/10 -- Controlled
Control percentage	100%
Number Plants Controlled:	
Total # of plants controlled (rhizomic connection?)	n/a
Notes:	
5 mL 8% v/v H2O -- Control very good, no damage to adjacent rose bushes.	

Efficacy Trial Results On Giant Hogweed	
Site name	Benton Drive
Address	8602 NE Benton Dr., Vancouver, WA
Plot #	Plot #4
Reference #	
Treatment Date	May 10, 2005
Treatment Method:	
Treatment Method	Injection
Herbicide	Roundup Pro Concentrate
Injection Dosage	5 mL 50% v/v H2O
Area:	
Area Treated	4 sq ft
Total number of plants in area (rhizomic connection?)	n/a
Number of plants/stems actually treated	4
Plant Phenology:	
Plant phenology	rosette to pre-bloom
Typical plant height	30"
Typical plant stem diameter	< .5"
Follow-up & Observations:	
Date	May 14, 2005
Observations	Plants wilted
Date	May 25, 2005
Observations	All plants dead to the ground
Control percentage:	
Of plants/stems treated--Number controlled	4 -- All controlled
Control percentage	100%
Number Plants Controlled:	
Total # of plants controlled (rhizomic connection?)	n/a
Notes:	
5 mL 50% v/v H2O -- Excellent immediate results	
No evidence of damage to adjacent rose bushes.	